

## **R E M A R K S**

### **Request for Reconsideration, Informal Matters, Claims Pending**

The non-final Office action mailed on 2 June 2006 has been considered carefully. Reconsideration of the claimed invention in view of any amendments above and the discussion below is respectfully requested.

Claims 1-5, 7-17 and 19-20 are pending.

### **Allowability of Claims Over Yasukawa, Kaplinski & Peacock**

#### Rejection Summary

Claims 1-2, 10 and 11 stand rejected under 35 USC 103(a) as being unpatentable over by U.S. Publication No. 2003/0210363 (Yasukawa) taken with EP 0472594 (Kaplinsky) in view of U.S. Patent No. 3,609,703 (Peacock).

#### Allowability of Claim 1

Regarding Claim 1, the prior art fails to disclose or suggest a

... method of activating a display element of a display device having n x m array of display elements, each display element coupled to a logic controlled switch, the method comprising:

applying a row address input and a row electrode input to control logic of the logic controlled switch of the display element;

applying a column address input and a column electrode input to the control logic of the logic controlled switch of the display element;

activating the display element with the logic controlled switch when the row address and row electrode inputs and when the column address and column electrode inputs satisfy a condition.

The Examiner concedes that Yasukawa fails to disclose an addressable latch having row and column inputs associated with each display element, but asserts that Kaplinsky and Peacock meets this deficiency.

Contrary to the Examiner's assertion, there is no motivation or suggestion to combine Yasukawa, Kaplinsky and Peacock as suggested by the Examiner. Yasukawa is concerned with reducing flickering and degradation of image quality caused by stray light in TFT switched displays. Kaplinsky discloses a programmable logic device (PLD) that receives a data input and a control signal input. It is unlikely that one skilled in the art would drive the display elements of Yasukawa with the programmable logical device of Kaplinsky. Moreover, the Examiner admits that the combination of Yasukawa and Kaplinsky alone does not meet the limitations of Claim 1. Peacock however does not remedy the deficiencies of Yasukawa and/or Kaplinsky. Peacock discloses a matrix of comparison circuits for searching entries in a database. In Peacock, each comparison circuit resets a latch when row and column bits do not match. One skilled in the art would not look to the comparison circuit of Peacock to drive the display elements in Yasukawa. Claim 1 is thus patentably distinguished over the art.

### Allowability of Claim 2

Claim 2 was amended for consistency with Claim 1. The prior art fails to disclose or suggest in combination with Claim 1

...comparing the row address input and the row electrode input,  
comparing the column address input and the column electrode  
input,  
activating the display element with the logic controlled switch  
based on results of the comparisons

Contrary to the Examiner assertion, Peacock does not disclose or suggest activating a display element with a comparison circuit. The comparison circuits of Peacock do not compare row address and electrode inputs and/or compare column address and electrode inputs. In Peacock, the comparison circuit compares row and column data. Claim 2 is thus further patentably distinguished over the art.

#### Allowability of Claim 10

Regarding Claim 10, the prior art fails to disclose or suggest a

... display device comprising:  
a plurality of display elements arranged in a matrix,  
each display element including a display pixel coupled to a  
switch,  
each display element including an addressable latch having an  
output coupled to a controlling input of the switch,  
the addressable latch having a row address input and a column  
address input.

Contrary to the Examiner's assertion, there is no motivation or suggestion to combine Yasukawa, Kaplinsky and Peacock as suggested by the Examiner. Yasukawa is concerned with reducing flickering and degradation of image quality caused by stray light in TFT switched displays. Kaplinsky discloses a programmable logic device (PLD) that receives a data input and a

control signal input. It is unlikely that one skilled in the art would drive the display elements of Yasukawa with the programmable logical device of Kaplinsky. Peacock does not remedy the deficiencies of Yasukawa and Kaplinsky. Peacock discloses a matrix of comparison circuits for searching entries in a database. In Peacock, each comparison circuit resets a latch when row and column bits do not match. One skilled in the art would not look to the comparison circuit of Peacock to drive the display elements in Yasukawa. Claim 10 is thus patentably distinguished over the art.

#### Allowability of Claim 11

Regarding Claim 11, the prior art fails to disclose or suggest in combination with Claim 10 "... the addressable latch having a row electrode input and a column electrode input."

Contrary to the Examiner assertion, Peacock does not disclose or suggest activating a display element with a comparison circuit. The comparison circuits of Peacock do not compare row address and electrode inputs and/or compare column address and electrode inputs. In Peacock, the comparison circuit compares row and column data. Claim 11 is thus further patentably distinguished over the art.

#### Allowability of Claims Over Yasukawa, Kaplinsky, Peacock & Santoro

#### Rejection Summary

Claims 1-2, 10 and 11 stand rejected under 35 USC 103(a) as being unpatentable over by U.S. Publication No. 2003/0210363 (Yasukawa) taken with EP 0472594 (Kaplinsky) in view of U.S. Patent No. 3,609,703 (Peacock) and U.S. Publication No. 2003/0020671 (Santoro).

#### Allowability of Claim 4

Regarding Claim 4, the prior art fails to disclose or suggest in combination with Claim 1

... activating at least some display elements of the display device at a first refresh rate,  
activating other display elements of the display device at a second refresh rate, different than the first refresh rate.

Santoro fails to meet the deficiencies of Yasukawa, Kaplinsky and Peacock in connection with the rejection of Claim 1, from which Claim 4 depends.

#### Allowability of Claim 5

Claim 5 was amended to include the limitations of Claim 6. Contrary to the Examiner's assertion, the prior art fails to disclose or suggest a

... method in a display device comprising an  $n \times m$  array of addressable display elements, the method comprising:  
activating at least some display elements characterizing a foreground image at a first rate;  
activating other display elements characterizing a background image at a second rate,  
the second rate less than the first rate;

activating the display elements with a corresponding logic controlled display element switch when row address and row electrode inputs and when the column address and column electrode inputs satisfy a condition.

Yasukawa, Kaplinsky, Peacock and Santoro fail to disclose or suggest "... activating the display elements with a corresponding logic controlled display element switch when row address and row electrode inputs and when the column address and column electrode inputs satisfy a condition" as recited in Claim 5. Yasukawa is concerned with reducing flickering and degradation of image quality caused by stray light in TFT switched displays. Kaplinsky discloses a programmable logic device (PLD) that receives a data input and a control signal input. Peacock discloses a matrix of comparison circuits for searching entries in a database wherein each comparison circuit resets a latch when row and column bits do not match. One skilled in the art would not look to the comparison circuit of Peacock to drive the display elements in Yasukawa. Santoro is relied upon for teaching different refresh rates. Amended Claim 5 is thus patentably distinguished over the art.

### **Allowability of Claims Over Yasukawa, Santoro & Whitby**

#### **Rejection Summary**

Claims 17-18 stand rejected under 35 USC 103(a) as being unpatentable over by U.S. Publication No. 2003/0210363 (Yasukawa) taken with U.S. Publication No. 2003/0020671 (Santoro) in view of EP 0608056 (Whitby).

Allowability of Claim 17

Claim 17 has been amended to include the limitations of Claim 18.  
The prior art fails to disclose or suggest in combination with Claim 1,

... method in a display device comprising an  $n \times m$  array of addressable display elements, the method comprising:  
selectively activating display elements by individually addressing the display elements to be activated, activating the display elements includes,  
applying a row address input and a row electrode input to control logic of the corresponding display element,  
applying a column address input and a column electrode input to the control logic of the corresponding display element, and  
activating the display element with a logic controlled switch when the control logic inputs satisfy a condition;  
reducing power consumption by addressing at least some of the display elements at a first frequency and addressing other display elements at a second frequency, the second frequency less than the first frequency.

Yasukawa is concerned with reducing flickering and degradation of image quality caused by stray light in TFT switched displays. Yasukawa does not disclose or suggest "... applying a row address input and a row electrode input to control logic of the corresponding display element, applying a column address input and a column electrode input to the control logic of the corresponding display element, and activating the display element with a logic controlled switch when the control logic inputs satisfy a condition..." as in Claim 17. Yasukawa does not disclose display elements having corresponding control logic with row/column address/electrode inputs. Santoro is relied upon for teaching different refresh rates and Whitby is relied upon for teaching a first refresh frequency less than a second refresh frequency. Amended Claim 17 is thus patentably distinguished over the art.

FOO ET AL.  
"Matrix Display Having Addressable  
Display Elements And Methods"  
Atty. Docket No. CS22497RA

Appl. No. 10/647,723  
Confirm. No. 2166  
Examiner V. Kovalick  
Art Unit 2629



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**Prayer For Relief**

In view of any amendments and the discussion above, the Claims of the present application are in condition for allowance. Kindly withdraw any rejections and objections and allow this application to issue as a United States Patent without further delay.

Respectfully submitted,

/ R K Bowler/

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ROLAND K. BOWLER II      15 AUG. 2006  
REG. NO. 33,477

MOTOROLA, INC.  
INTELLECTUAL PROPERTY DEPT. (RKB)  
600 NORTH U.S. HIGHWAY 45, W4-37Q  
LIBERTYVILLE, ILLINOIS 60048

TELEPHONE NO. (847) 523-3978  
FACSIMILE NO. (847) 523-2350